



# State of Utah

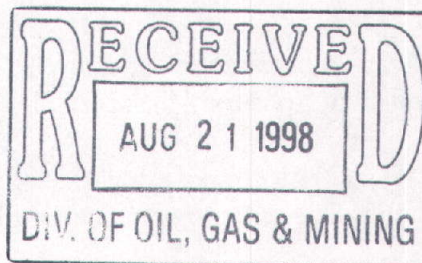
## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

Michael O. Leavitt  
Governor

Dianne R. Nielson, Ph.D.  
Executive Director

Don A. Ostler, P.E.  
Director

288 North 1460 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870  
(801) 538-6146  
(801) 538-6016 Fax  
(801) 536-4414 T.D.D.  
www.deq.state.ut.us Web



m/053/005  
Goldstrike

Water Quality Board  
Leroy H. Wullstein, Ph.D.  
Chairman

Lynn F. Pett  
Vice Chairman

Robert G. Adams  
R. Rex Ausburn, P.E.

Nan Bunker

Leonard Ferguson

Dianne R. Nielson, Ph.D.

K.C. Shaw, P.E.

Ronald C. Sims, Ph.D.

J. Ann Wechsler

William R. Williams

Don A. Ostler, P.E.  
Executive Secretary

August 18, 1998

Mr. Doug D. Jensen  
USMX of Utah, Inc.  
P.O. Box 2650  
St. George, Utah 84770

Dear Mr. Jensen:

SUBJECT: Approval for Land Application - Permit by Rule, Ground Water  
Permit No. UGW530001

We have reviewed your proposal for land application of drain down water from heap leach pads 1&2. We received this information on May 20, 1998, subsequently we have negotiated this proposal with you on numerous occasions.

The proposal of land applying the drain-down water over an area of four acres is an interim water management plan. A flow rate between 25 and 40 gallons per minute will be land applied to an area of two acres. The next day the fluids will be rotated and applied to the other two acres.

Based on our review, we hereby approve USMX's request to land apply fluids from heap leach pads 1 & 2 to the designated area subject to the following conditions:

1. The chemical concentrations of solutions discharged to the pond must not exceed, by more than 25 percent, those levels of a sample analyzed by Chemtech-Ford Laboratories (Group # 21586 & Lab # 98-U001578).
2. All discharges to the land irrigation system must cease after December 31, 1998, This is to assure the chemical concentrations of the solutions remains low,
3. Samples must be collected each month and analyzed for suspect metals listed in the attenuation study and the results submitted to this office.

The attenuation data, submitted to us on September 1, 1995, for a 6-foot column suggests that most parameters in the rinse water are below the ground water standards and the protection levels specified in the groundwater permit. However, TDS and nitrate are above the protection levels as listed in the permit. Depletion of nitrate, based on the calculated agronomic rate, will not achieve the required protection levels. Based on the attenuation study the absorption capability of the 700+ feet of soil

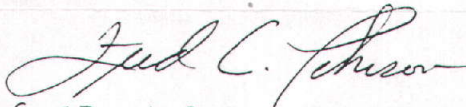
Mr. Doug D. Jensen  
August 18, 1998  
Page 2

material above the ground water aquifer appears adequate to contain residual nitrate and TDS from the land application of solutions during the remainder of this year.

Modeling should be provided for further evaluation of your proposal for the full depth of fill material in order to determine the allowable long range use of land application.

If we can be of further assistance, please contact Lyle Stott of my staff.

Sincerely,

  
for Don A. Ostler, P.E.  
Director

DAO:LWS:ERB

cc: Mr. Wayne Thomas, Dist. Engineer  
JBR Consultants  
Division of Oil, Gas and Mining  
Southeastern Utah Public Health Department

FAWQ\ENG-WQ\STOTT\WP\MINING\USMX-(7-24-98) IRRIGATION OF SOLUTION .AP.WPD  
FILE:USMX